

Appln. No. 09/770,577
Amdr. dated Feb. 4, 2004
Reply to Office Action of Nov. 4, 2003
Docket No. 6169-145

IBM Docket No. BOC9-1999-0092

REMARKS/ARGUMENTS

These remarks are made in response to the Office Action of November 4, 2003 (Office Action). As this amendment is timely filed within the three month shortened statutory period, no fee is necessary.

On page 2 of the Office Action, claims 1-13 have been rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,076,061 to Kawasaki, *et al.* (Kawasaki). On Page 2 of the Office Action, claims 1, 6, 7, and 9 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 6,112,174 to Wakisaka, *et al.* (Wakisaka) in view of Kawasaki.

The Applicants have amended independent claims 1, 6, 7, and 9 to clarify aspects of the present invention. Support for this amendment can be found at page 16, lines 7-8 of the Applicants' specification. Dependent claims 5, 8, and 13 have been amended to conform with the amendments made to the independent claims. Finally, claims 4 and 12 have been cancelled. No new matter has been added in consequence of this amendment.

Prior to addressing the rejections on the art, a brief review of the Applicants' invention is appropriate. The Applicants have invented a method, system, and apparatus for completing a user input using speech recognition technology within a portable or embedded computing device. In particular, a user input can be received that specifies one or more characters corresponding to at least one recognizable word selection of a speech recognition system disposed within a portable computing device.

The one or more characters specified by the user input are compared with a set of selections within the speech recognition system (SRS). The set of selections of the SRS can be limited to an available set of selections based upon the comparing step, i.e. those selections that correspond with the one or more characters specified by the user.

A user spoken utterance then can be received. The user spoken utterance can be matched with one of the selections of the available set of selections to speech recognize the user spoken utterance. By limiting the possible recognizable selections, the present invention reduces the amount of processing power required thereby facilitating the use of the present invention within embedded and portable computing devices.

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Turning to the rejections on the art, claims 1-13 have been rejected under 35 U.S.C. § 102(e) as being anticipated by Kawasaki. Kawasaki teaches a SRS which senses a user's visual direction, or visual focal point. That information is used to selectively utilize or activate various dictionaries corresponding to an application or icon at which the user is looking.

Regarding claims 1, 6, 7, and 9, Kawasaki fails to teach or suggest the Applicants' invention as claimed. In particular, Kawasaki teaches that the SRS relies upon eye-tracking technology which provides information indicating the direction or focal point of a user's gaze. In contrast, the present invention receives user inputs specifying one or more characters which correspond to recognizable word selections in the SRS. Detecting the viewpoint of a user, as taught by Kawasaki, is wholly unrelated to the Applicants' invention.

Moreover, the Applicants' invention is directed to use within a portable or embedded system. Such systems usually are characterized by low processing power (i.e. memory, processor speed and ability). As such, the present invention would not utilize the viewpoint technology disclosed by Kawasaki as the processing requirements would likely exceed the capabilities of a portable or embedded computing device.

As Kawasaki fails to teach or suggest each limitation of the Applicants' independent claims as amended, withdrawal of the 35 U.S.C. § 102(e) rejection with respect to claims 1-13 is respectfully requested.

Claims 1, 6, 7, and 9 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Wakisaka in view of Kawasaki. Wakisaka teaches a speech recognition system which can "changeover" to utilize any of a variety of different dictionaries. Changeover from one dictionary to another is driven by the geographic location of the speech recognition system, for example as determined by a Global Positioning System (GPS).

The Examiner concedes that Wakisaka utilizes GPS to trigger changes in dictionary usage and that such a mechanism is not manual in nature. The Office Action, however, notes that Kawasaki teaches that a user input can be used to select a dictionary. In support, FIGS. 1, 7, and 9 have been cited. As such, it is asserted that it would have been obvious to one of ordinary skill in the art at the time of the invention to let the user select a dictionary as taught by Wakisaka for the purpose of providing an alternative means to GPS.

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Kawasaki, however, fails to cure the deficiencies of Wakisaka. In particular, while Kawasaki discloses a manual process, i.e. one under user control, the mechanism used by Kawasaki is not the same as, nor even related to, that used by the present invention. Specifically, as noted, Kawasaki relies upon detecting the focal point of a user's gaze and does not receive characters corresponding to a recognizable word. Moreover, the technique disclosed by Kawasaki, more than likely, would not be a workable alternative as the processing requirements to perform eye tracking are rigorous and beyond those of a typical portable or embedded computing device. In consequence, one attempting to solve the problems addressed by the present invention would not turn to Kawasaki for a solution.

In summary, Wakisaka utilizes GPS technology and Kawasaki utilizes eye-tracking technology. Each discloses a very different approach than that taught and claimed by the Applicants. As such, neither reference, taken individually or in combination, teaches or suggests that receiving characters corresponding to the word to be spoken by the user can be used to limit the number of available selections to which a user spoken utterance can be compared during speech recognition. Accordingly, one is left without any motivation to combine Kawasaki with Wakisaka.

As neither Wakisaka, Kawasaki, nor any combination thereof teaches or suggests the Applicants' invention as claimed, withdrawal of the 35 U.S.C. § 103(a) rejection with respect to claims 1, 6, 7, and 9 is respectfully requested.

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The Applicants believe that this application is now in full condition for allowance, which action is respectfully requested. The Applicants request that the Examiner call the undersigned if clarification is needed on any matter within this Amendment, or if the Examiner believes a telephone interview would expedite the prosecution of the subject application to completion.

Respectfully submitted,

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